STUDY TITLE North Slope Subsistence Study

REPORT TITLE: North Slope Subsistence Study - Wainwright 1988 and 1989

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PROJECT MANAGER: Stephen R. Braund

AFFILIATION: Stephen R. Braund & Associates

ADDRESS P.O. Box 1480, Anchorage, AK 99510

PRINCIPAL INVESTIGATOR(S) Stephen R. Braund

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BACKGROUND The North Slope Subsistence Study entailed three years of research in Barrow and two years in Wainwright on residents' subsistence harvests. The major focus of the study was to collect harvest and location data for species used in these communities. This report is the second of two annual reports on the findings of the Wainwright research. The first year of Wainwright data collection began on April 1, 1988 and continued through March 31, 1989, and is referred to as "Year One." Year Twn ran from April 1, 1989 through March 31, 1990. This report presents Year Two data for the first time as well as updated Year One data.

OBJECTIVES: (1) To collect, analyze and report genera lizable subsistence harvest data by species for Wainwright and (2) to provide accurate mapped harvest location information for Wainwright.

DESCRIPTION: The community of Wainwright was small enough that the study team decided to attempt to include all permanent households in the study, i.e., conducting a census rather than a sample. Of the 124 households in the study in Year One and 119 households in Year Two, 100 households participated in the study for the full two years. These households are referred to as the core study households. Through periodic harvest discussions throughout each study year, data were collected on the species harvested, quantity harvested, location and date of harvest. Harvest data were processed to produce numeric output on several aspects of subsistence such as average annual household and per capita harvests and monthly harvests by species. This report also presents a brief history of Wainwright subsistence, data on Inupiat harvest levels, an

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analysis of harvest patterns over the two years of the study, an analysis of harvests by harvester level, a comparison of Barrow and Wainwright harvests, an analysis of the status of major faunal resources, and a detailed methodology. Data are presented in tables, charts, graphs and maps.

SIGNIFICANT CONCLUSIONS During the two study years, Wainwright residents collectively harvested at least 46 different species for an average of approximately 304,047 pounds of usable resource product per year, equal to 2,624 pounds per household or 638 pounds per capita. Marine mammal harvests dominated Wainwright subsistence, providing 70 percent of the usable pounds harvested, followed by terrestrial mammals (24 percent). Fish and birds provided only four percent and two percent (respectively) to the overall harvest.

STUDY RESULTS Bowhead whale contributed the most usable pounds (105,274 pounds per year averaged over the two years). Wainwright landed four bowheads in Year One and two in Year Two. Bowhead whales produced 35 percent of the total subsistence harvest, while walrus contributed 27 percent (81,708 pounds) and caribou contributed 23 percent (7 1,141 pounds) of the total harvest. With bearded seal (five percent), these four species combined yielded 90 percent of the total harvest. The remaining 10 percent consisted of (in order of importance by weight): least cisco, polar bear, rainbow smelt, ringed seals, and less than one percent each of arctic grayling, brant, beluga whale, spotted seal, moose, brown bear, ground squirrel and various bird and fish species. Berries, coal and ice were also collected by Wainwright residents, and fox, ermine, wolf and wolverine were harvested for their furs.

Eighty-seven percent of the year's harvests by weight occurred in the six month period from April through September. Wainwright whalers landed bowheads only April and May, with May being the peak month for bowhead harvests and for subsistence harvests overall. Whalers also harvested seals and geese from their camps on the ice during April, May and June. traveled inland in May and June to hunt geese, ptarmigan and a few caribou from Walrus and bearded seal were harvested June through their spring camps. September, though predominantly in July. The most intensive caribou hunting occurred from July through October when 76 percent of the year's caribou were Ringed and spotted seal harvests occurred throughout the year, peaking in the summer months (June and July). Most of the fish were harvested in August, September and October. Harvests during the quiet months from November through March included caribou, polar bears, a few ringed seals, fish caught under the ice, and forbearers (sought in deep winter when their coats are thickest).

During the study, marine mammal harvests were concentrated within a 15 mile radius offshore from Wainwright, with additional harvests extending northeast to Peard Bay and southwest to Icy Cape. Terrestrial mammal harvests were widespread, occurring along the coast southwest to Cape Sabine and northeast almost to Barrow, as well as inland to the Brooks Range. Fish harvests occurred principally along the Kuk River system which extends far inland from Wainwright, while bird harvest areas were split between this river system and the coastal areas near Wainwright.

STUDY PRODUCT(S) Braund, Stephen R. & Associates and Institute of Social and Economic Research. 1993. North Slope Subsistence Study - Barrow 1987, 1988 and 1989. Technical Report No. 149. OCS Study MMS 91-0086. Prepared for U.S. Dept. of Interior, Minerals Management Service, Alaska OCS Region. Anchorage, AK.

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